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ANSWER 13 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
L4
     1994:30773 CAPLUS
AN
DN
     120:30773
     Oxadiazole derivatives having acetylcholinesterase-inhibitory
ΤI
     and muscarinic receptor agonist activity
     Takasugi, Hisashi; Kuno, Atsushi; Ohkubo, Mitsuru
     Fujisawa Pharmaceutical Co., Ltd., Japan
PA
     PCT Int. Appl., 149 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
                                             APPLICATION NO.
                                                               DATE
                       KIND DATE
      PATENT NO.
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                                                               19921218
                                             WO 1992-JP1658
                            19930708
      WO 9313083
                        A1
PΙ
          W: AU, CA, HU, JP, KR, RU, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                              GB 1991-27533
                                                               19911231
                                                               19921005
                                              GB 1992-20904
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                                              AU 1993-31714
                              19930728
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                                              WO 1992-JP1658
                                              EP 1993-900416
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                              19941019
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      EP 619814
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                                                                19911231
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                                              JP 1992-511547
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                                                                19940624
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       US 5622976
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                                              GB 1991-27533
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                                              GB 1992-20904
                                                                 19921005
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                                               WO 1992-JP1658
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OS MARPAT 120:30773

IT 151097-86-8P 151097-87-9P 151307-60-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and acetylcholineesterase inhibitory and muscarinic receptor agonist activity of)

RN 151097-86-8 CAPLUS

CN 1,2,4-Oxadiazole-3-carboxamide, 5-(1-azabicyclo[2.2.2]oct-3-yl)-N-[1-(phenylmethyl)-4-piperidinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 151097-87-9 CAPLUS

CN' 1,2,4-Oxadiazole-3-carboxamide, 5-(1-azabicyclo[2.2.2]oct-3-yl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 151307-60-7 CAPLUS

CN 1,2,4-Oxadiazole-3-carboxamide, 5-(4-nitrophenyl)-N-[1-(phenylmethyl)-4-piperidinyl]-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 151307-59-4 CMF C21 H21 N5 O4

$$0 \\ N \\ N \\ C \\ NH \\ CH_2-Ph$$

CM 2

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CRN -110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

The title compds. R1QZXAM [A = direct bond, lower alkylene, lower alkynylene; M = (un)substituted heterocyclic group contg. gtoreq.1 N atom(s); Q = oxadiazolediyl; R1 = lower alkyl, (un)substituted arylalkyl, heterocyclic group, (un)substituted aryl, (un)substituted arylalkyl, heterocyclic group, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted aralkenyl; X = direct bond, CONR4, R8CN; R4 = H, alkyl; R8 (un)substituted aralkenyl; X = direct bond, vinyl (sic)], useful = HO, protected HO group, CO, NHCO; Z = direct bond, vinyl (sic)], useful for the treatment of central nervous system disorders (e.g., amnesia, Alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, a-ethoxycarbonyl-5-(quinuclidin-3-yl)-1,2,4-oxadiazole and 1-benzyl-4-(2-aminoethyl)piperidine were heated together in soln. at 1-benzyl-4-(2-aminoethyl)piperidine were heated together in soln. at 1-00.degree. for 2 h and treated with an ethanolic soln. of HCl, producing 5-(quinuclidin-3-yl)-3-[[2-(1-benzylpiperidin-4-yl)ethyl]carbamoyl]-1,2,4-oxadiazole dihydrochloride, m.p. 210.degree. (decompn.)